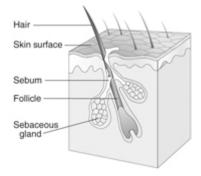
### In-Depth



# **Overview**

# **Points To Remember About Alopecia Areata**

- Alopecia areata causes hair to fall out. Most people only lose hair in small, round patches.
   Some people may lose more or all their hair.
- Your hair may grow back, even if you lose all of it. But it may fall out again.
- Alopecia areata does not make you feel pain and does not make you sick. You can't give it to others.
- Genes and environment work together to determine whether you get alopecia areata.
- There is no cure. Medicines approved for other diseases can help hair grow back. Talk to your doctor about which medicines are best for you.
- Protect bare skin from sun, dirt, and germs. Use cosmetics to cover small amounts of hair loss. Hats, wigs, and scarves can cover more hair loss.



Normal hair follicle and surrounding structures.

Alopecia areata is a disease that causes round patches of hair loss. It can lead to total hair loss. Alopecia areata is an autoimmune disease. That means your immune system, which normally helps protect the body from infection and disease, attacks the hair follicles.

In most cases, hair falls out in small, round patches about the size of a quarter, producing a few

bare patches. Hair loss is more widespread in some people. In rarer cases, the disease can cause total loss of hair on the head (referred to as alopecia areata totalis) or the entire body (alopecia areata universalis).

Your doctor can't predict if your hair loss will end at some point, or whether it will grow back. This is often the most difficult and frustrating part of the disease. You may continue to lose hair, or your hair loss may stop. The hair you have lost may or may not grow back, and you may or may not continue to develop new bare patches.

# **Who Gets**

Alopecia areata affects nearly 2 percent of Americans, regardless of sex, age, and race. It often begins in childhood.

You are at a slightly higher risk of developing alopecia areata if a close family member has the disease. Your risk is even greater if your family member lost his or her first patch of hair before age 30.

Alopecia areata often occurs in people whose family members have other autoimmune diseases, such as type 1 diabetes, rheumatoid arthritis, thyroid disease, systemic lupus erythematosus, pernicious anemia, or Addison's disease. People who have alopecia areata do not usually have other autoimmune diseases, but they are more likely to have thyroid disease, atopic eczema (long-term disease causing dry, itchy skin), nasal allergies, and asthma.

# **Symptoms**

Alopecia areata is not painful and does not make you feel sick. People who have the disease are generally healthy. In most cases, hair falls out in small, round patches about the size of a quarter, producing a few bare patches. In some people, there is more hair loss. Although it isn't common, the disease can cause total loss of hair on the head (referred to as alopecia areata totalis) or loss of all body hair (alopecia areata universalis).

# **Causes**

In alopecia areata, immune system cells called white blood cells attack the rapidly growing cells in the hair follicles. The affected hair follicles become small and drastically slow down hair production. Fortunately, the stem cells that continuously supply the follicle with new cells do not seem to be targeted. So the follicle always has the potential to regrow hair.

It is not clear what causes alopecia areata. Although it is possible you inherited the condition, most children with alopecia areata do not have a parent with the disease. Scientists suspect a

couple of genes may work together to increase the chance of having the disease. This makes it highly unlikely that your child would inherit all of the genes needed to put him or her at risk for alopecia areata.

Even if you have all of the necessary genes, it's possible you will not get alopecia areata. In identical twins having all of the same genes, there is a 55 percent chance that a twin will develop alopecia areata if the other one has the disease. This shows that other factors besides genetics are needed to trigger the disease. The trigger may be a virus or something else in your environment.

# **Treatment**

There is no cure for alopecia areata and no medications to treat it. However, medicines approved for other purposes can help hair grow back, at least temporarily. However, these medications do not prevent future hair loss. Talk with your health care professional about the best option for you. A combination of treatments may work best. Ask how long you will need to take medications, how long it will take before you see results, and about the possible side effects.

Your hair may regrow with or without treatment, but it may also fall out again. No one can predict when it might regrow or fall out, since the disease differs from person to person.

In most, the regrown hair is ultimately the same color and texture as the original hair. In some, the initial hair regrowth is white, with a gradual return of the original hair color.

# **Living With**

Alopecia areata is not painful and will not make you feel sick. It does not shorten your life and should not interfere with going to school, playing sports, exercising, working, marrying, or raising a family. If your child has alopecia areata, it is often helpful to tell teachers, coaches, and other caregivers of the disease. Let them know that alopecia areata is not contagious, and that your child is healthy.

If you have alopecia universalis (loss of all body hair), the lack of eyelashes, eyebrows, and hair in the nose and ears can make you more vulnerable to dust and germs entering the eyes, nose, and ears.

The emotional aspects of living with hair loss can be hard, especially in a culture that views hair as a sign of youth and good health. Many people cope by learning as much as they can about the disease, speaking with others who are facing the same problem, and, if necessary, seeking counseling to help build a positive self-image.

There are many things you can do to cope with the effects of this disease, both physical and emotional:

### Establish a support network.

- Talk with others who are dealing with the same issues. Nearly 2 percent of Americans have this disease at some point in their lives, so you are not alone. The key to coping is valuing yourself for who you are, not for how much hair you have or don't have.
- If you would like to talk with other people who are coping with alopecia areata, the
   <u>National Alopecia Areata Foundation</u> can help through its pen pal program, message
   boards, annual conference, and support groups.

## Reduce the physical dangers or discomforts of lost hair.

- Use sunscreens for the scalp, face, and all exposed skin.
- Wear eyeglasses (or sunglasses) to protect your eyes from sun, and from dust and debris when eyebrows or eyelashes are missing.
- Wear wigs, caps, or scarves to protect your scalp from the sun and keep the head warm.
- Apply antibiotic ointment inside your nostrils, if nostril hair is missing, to keep them moisturized and to protect them against germs and dust.

### Minimize the effects on appearance.

- Wear a wig or hairpiece, which can look natural and stylish, if you have a greater degree of hair loss.
- Apply a hair-colored powder, cream, or crayon to the scalp to make hair loss less obvious by eliminating the contrast between the hair and the scalp.
- Use attractive scarves, bandanas, or caps.
- Use an eyebrow pencil to mask missing eyebrows.
- Ask your doctor or members of your local support group to help you find a cosmetologist who specializes in working with people whose appearance is affected by medical conditions.

# **Research Progress**

Although a cure is not yet in sight, research is giving us a better understanding of the disease. This will likely lead the way to better treatments for alopecia areata, and eventually a way to cure it or even prevent it.

Here are some promising areas of research:

- **Developing animal models.** By studying mouse models of alopecia areata, researchers hope to learn more about the disease and eventually develop treatments for people.
- Studying hair follicle development. Studying how hair follicles form, develop, and cycle through growth and resting phases may lead to treatments for the hair loss that goes

along with the disease.

- Understanding stem cell biology. Stem cells are responsible for regrowth and
  maintenance of your skin and hair follicles, as well as other tissue. Stem cells in the follicle
  appear to be unharmed in alopecia areata. This could explain why you may regrow hair
  that is lost due to alopecia areata. Scientists study stem cells to better understand factors
  that trigger the disease.
- Finding genes. Scientists have identified genes associated with alopecia areata. They also discovered that alopecia areata has genetic similarities to other autoimmune diseases, namely type 1 diabetes, rheumatoid arthritis, and celiac disease. An understanding of the genetics of the disorder will aid in prevention and treatment. To help gather the necessary information for a genetic analysis, the NIAMS supported the development of the National Alopecia Areata Registry, which collects information from people with the disease.

## **Related Resources**

#### U.S. Food and Drug Administration

Toll free: 888-INFO-FDA (888-463-6332)

Website: https://www.fda.gov

Drugs@FDA at <a href="https://www.accessdata.fda.gov/scripts/cder/daf">https://www.accessdata.fda.gov/scripts/cder/daf</a>. Drugs@FDA is a searchable catalog of FDA-approved drug products.

#### Centers for Disease Control and Prevention, National Center for Health Statistics

Website: https://www.cdc.gov/nchs

#### **National Institute of Allergy and Infectious Diseases**

Website: https://www.niaid.nih.gov

#### American Academy of Dermatology

Website: https://www.aad.org/public/diseases/hair-and-scalp-problems/alopecia-areata

#### Alopecia Areata Registry

Website: https://www.mdanderson.org/research/departments-labs-institutes/programs-

centers/alopecia-areata-registry.html

#### National Alopecia Areata Foundation (NAAF)

Website: https://www.naaf.org

If you need more information about available resources in your language or other languages, please visit our webpages below or contact the NIAMS Information Clearinghouse at NIAMSInfo@mail.nih.gov.

Asian Language Health Information

• Spanish Language Health Information

### Join a Clinical Trial

Find a Clinical Trial

### **Related Information**

Cicatricial Alopecia (Overview)

## **View/Download/Order Publications**

Alopecia Areata, Easy-to-Read Fast Facts
Alopecia Areata, Questions and Answers about
Autoimmune Diseases, Understanding